JIFSAN Evaluation Report

FSMA Produce Safety Rule Remote Grower Training

2020 Online Evaluation Summary

Metrics Working Group
2021/07/10
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The FSMA Produce Safety Rule Remote Grower Training started in June, 2020 in four Latin American Countries (Chile, Dominican Republic, Honduras, and Mexico). The Chile and Dominican Republic trainings were delivered by IICA instructors and the Honduras and Mexico trainings were delivered by JIFSAN instructors. By the end of 2020, 27 courses were delivered.

JIFSAN Online Evaluation was designed to be deployed as part of the International FSMA Produce Safety Rule Remote Grower Training delivered by either IICA or JIFSAN. The Online Evaluation started in July, 2020. It was updated in September of the same year. Between July and December, 2020, the evaluation links were emailed to 374 participants in 23 courses. JIFSAN received 315 responses, including 285 pre-training evaluations and 234 post-training evaluations. 204 participants submitted both pre- and post-training evaluations, and 119 participants indicated that they were growers in both surveys.

The Online Evaluation consisted of a pre-training survey and a post-training survey. In the pre-training survey, training participants completed a background questionnaire and a multiple choice test on their produce safety knowledge. If participants indicated that they were growers, the evaluation directed them to additional grower survey questions on farm characteristics. In the post-training survey, participants saw the same multiple choice knowledge test. They were also asked to respond to questions on their learning experience, training satisfaction, and changes in confidence in applying produce safety knowledge after attending the training. If participants indicated that they were growers, they were given additional questions on change in attitudes towards produce safety practices as a result of the training.

The produce safety knowledge test was developed by the Southern Center at the University of Florida, the questionnaires were developed by JIFSAN. Instructors and staff from JIFSAN and IICA contributed to the Spanish translation. The Online Evaluations were distributed through Qualtrics with the help from the instructors.

This evaluation summary included all submitted responses. For example, analyses of pre-training evaluation questions included all 285 responses, regardless if we were able to match the pre-training evaluations to the participants’ post-training evaluations. Analyses of pre-training evaluation grower survey questions included all 191 responses, regardless if the participants submitted matching post-training grower survey. However, analyses comparing pre- and post-training survey answers included only participants who submitted both pre- and post-training evaluations.

To reduce potential survey fatigue, increase response rate, and improve data quality, the evaluation questionnaires were simplified at the end of August. A number of questions asked in the July-August version were dropped in September-December. These included all questions in the Training Delivery Method section, three questions from the Grower Survey section (challenge to comply with the Produce Safety Rule, percentage of farm produce consumed raw, and percentage of farm produce processed), and four sets of questions on attitudes
toward produce safety practices before and after training. A number of questions repeated in both the pre- and post-training evaluations were consolidated into questions on changes after attending training. These included self-assessments of knowledge level before and after training and three sets of questions on attitudes towards produce safety practices. Summary charts or lists to these questions were listed on separate pages for different evaluation versions. Only participants from July-August courses answered questions in the July-August version of Online Evaluation, and participants from September-December courses answered questions in the September-December version.

In addition, one question on suggestions to improve future training was updated by including two more options for respondents -- more hours each day for fewer days and fewer hours each day for more days. This question, together with the remaining unchanged questions, were summarized based on the full 2020 data set.

Despite our effort to improve the evaluation questionnaires, between September and December, 2020, the response rate was lower than expected in a few trainings. Unfortunately, we did not have sufficient information on the causes of the decreased response rate.

This report also includes a summary of PSA Grower Training Course Evaluation from 139 participants and 11 selected courses. The PSA evaluation's by-module questions offer unique insights into participants learning experience on specific topics.
Evaluation Delivery and Submission

Pre- & Post-Training Evaluation Submissions

<table>
<thead>
<tr>
<th>Country</th>
<th>Pre-training only</th>
<th>Post-training only</th>
<th>Both</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chile</td>
<td></td>
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<tr>
<td>Dominican Republic</td>
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<td>Honduras</td>
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<tr>
<td>Mexico</td>
<td></td>
<td></td>
<td>140</td>
</tr>
<tr>
<td>USA</td>
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<td></td>
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</tbody>
</table>

Participants Identified as Growers

<table>
<thead>
<tr>
<th>Evaluation Type</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-training evaluation</td>
<td>180</td>
<td>70</td>
</tr>
<tr>
<td>Post-training evaluation</td>
<td>185</td>
<td>75</td>
</tr>
</tbody>
</table>

Note: Only participants who have identified themselves as growers will proceed to the Grower Survey section of the evaluations.
Participant Background

Participant Countries of Origin
- USA, 1%
- Chile, 11%
- Dominican Republic, 10%
- Honduras, 30%
- Mexico, 47%

Gender
- Female, 37%
- Male, 63%

Formal Education
- Bachelor's degree, 64%
- Highschool or technical school, 15%
- Postgraduate degrees, 12%
- Not complete highschool, 1%
- Other, 8%
Knowledge Test Results

Pre- and Post-Training Knowledge Test Performance by Question

Note: This analysis only includes participants who submitted both pre-training and post-training tests. Participants from the first two courses in July could not respond to test Q1 in the post-training evaluation due to technical issues. Therefore, they did not have Q1 score in the post-training test.

Pre- and Post-Training Knowledge Test Score Distributions

Note: This analysis only includes participants who submitted both pre-training and post-training tests. Participants from the first two courses in July could not respond to test Q1 in the post-training evaluation due to technical issues. Therefore, they did not have Q1 score in the post-training test.
Test Score Improvement Status (Area = Number of Participants)

Note: This analysis only includes participants who submitted both pre-training and post-training tests. Participants from the first two courses in July could not respond to test Q1 in the post-training evaluation due to technical issues. Therefore, they did not have Q1 score in the post-training test.
Assessment of Training

Change in Confidence in Applying Produce Safety Practices

- No answer, 0%
- Strongly negative, 0%
- Negative, 1%
- No effect, 3%
- Strongly positive, 55%
- Positive, 40%

Satisfaction with Training

- No answer, 0%
- Very dissatisfied, 3%
- Average, 1%
- Satisfied, 32%
- Very Satisfied, 63%

Difficulty in Training

- None
- Limited prior experience
- Language issues
- Content not relevant
- Unprepared for the advanced level of training
Attitude Outcomes (2020 July-August)

Attitude towards produce safety practices before and after training

- Having a written food safety plan
- Water treatment monitoring
- Harvest pre-assessment and harvest practices
- Hand-washing
- Training
- Composting
- Keeping records of the above practices

Note 1: The hatched bars summarize responses from post-training evaluations.
Note 2: This graph only includes responses from participants who submitted grower sections from both the pre-training and post-training evaluations.
Attitude Outcomes (2020 September-December)

Change of Attitude towards Produce Safety Practices

- Monitoring Water Treatment
- Harvest Pre-Assessment and Harvest Practices
- Composting

Legend:
- No answer
- I already have water treatment monitoring on my farm or decided to do so before training.
- No change, my current practice is working well or I know better alternatives.
- No change, too difficult to implement.
- The training convinced me it's somewhat important, I am more likely to implement it after training.
- The training convinced me it's somewhat important, but difficult to implement on my farm.
- The training convinced me it's very important, and I will implement it on my farm after training.
- The training convinced me it's very important, but difficult to implement on my farm.
- Not sure, I don't know much about it.
Additional Charts (2020 July-August)

**Challenge to Comply with the Produce Safety Rule (FSMA PSR)**

- I am not sure
- Cost of compliance for producers
- Producers' current knowledge on FSMA PSR
- Producers' training participation
- The amount of training that will be needed by producers
- Producers' attitudes toward FSMA PSR
- Extension capacity to train
- Info Available on FSMA PSR

![Bar chart showing the number of participants facing challenges with FSMA PSR.](chart_1)

**Percentage of Farm Produce Consumed Raw**

- No answer, 7%
- < 50%, 7%
- > 50%, 85%

![Pie chart showing the percentage of farm produce consumed raw.](chart_2)

**Percentage of Farm Produce Processed**

- < 50%, 38%
- No answer, 62%

![Pie chart showing the percentage of farm produce processed.](chart_3)
Additional Charts (2020 September-December)

Change in Knowledge on FSMA Produce Safety Rule

- Strongly positive, 74%
- Positive, 22%
- Negative, 3%
- No answer, 1%
Training Delivery Method Feedback (2020 July-August)

Preference Towards Remote Training via Zoom (the Current Method)

- Overall: [Bar Chart]
- A walk-through of the training material led by the instructor: [Bar Chart]
- Interaction with instructors: [Bar Chart]
- Interaction with other students: [Bar Chart]
- Train at home: [Bar Chart]
- Structured training time table: [Bar Chart]
- Other: [Bar Chart]

Have You Taken Training Delivered in the Following Method

- In-person: [Bar Chart]
- Online: [Bar Chart]
Suggestions to Improve Training

1. Videos, and case studies
2. One of the instructors be a little more emphatic in each module that corresponds to him and not just read the word quickly
3. For virtual courses it is essential that instructors can ensure a good internet connection
4. More practical language and real experiences of problems and solutions
5. Practices of various topics, especially the SOPs
6. Greater fluency by the drs. exhibitors.
   - It is tiring for so many hours in front of slow people who go off topic to give personal experiences that are not adequate.
7. Dynamism in the exhibitions, my congratulations to [instructor], the lady from FDA (I don't remember the name) and [instructor], but there were other exposures that made me slow and zero dynamics ... that makes learning difficult in my case particular.
8. Chemical cleaning and disinfection products
9. As a topic that can be put into practice is discussed
10. Extend the time; since, it is a lot of and very relevant information.
11. Trainings more often the more you listen the more you learn
12. Explain real examples about the application, monitoring and consequences of the PSR FSMA effect
13. Face-to-face training, online training has disadvantages for example, keeping the listener attentive always in the presentation
Suggestions on Training Delivery Method (via Zoom, 2020 July-August)

1. However, take into account that the presentations of some facilitators should allow the student to know their experience because just reading the slides is not enough.
2. At the end of this problem of the pandemic, take a field practice.
3. fantastic
4. Permanent assistance in case of any inconvenience.
5. Whenever possible field practice is important.
6. Give real examples, from daily life and that occur in the work area.
7. Include some companion videos.
8. Internet service.
9. video material.
11. Course planning.
Training and Food Safety Practices

- The training was well organized
- I have a manual at the start of training
- I have audio and/or video problems
- Other educational materials should be included
- Training level sufficient to guide me in implementing regulatory requirements
- Attended GAP or produce safety training before
- Currently have a farm Food Safety Plan
- Participated in a third-party audit for food safety practices

Number of Participants